

REMARKS

Summary of Telephonic Interview with the Examiner

Applicants and their attorney thank the Examiner for the courtesy of the telephonic interviews conducted on May 1, 2007 and August 1, 2007 during which the foregoing amendments to the claims were discussed.

Amendments to the Claims

Claims 1, 4, 6, 10-16 and 39-58 were pending as of the issuance of the Final Office Action. In the Amendment to the Claims spanning pages 2 to 6 of this paper, claims 1, 4, 6, 15, 16, 39-41, 43-50, 52, 53, 56 and 57 have been amended and claims 54, 55 and 58 have been cancelled without prejudice. Accordingly, upon entry of the amendments presented herein, claims 1, 4, 6, 10-16, 39-53, 56 and 57 will remain pending in this application.

Claims 49-58 were previously withdrawn in response to a Restriction Requirement. Accordingly, in view of the Examiner's indication that the composition claims are allowable and as discussed during the telephonic interview with the Examiner on May 1, 2007, it is Applicants' understanding that claims 49-53, 56 and 57 (which are method claims that depend from and include all of the limitations of the allowable composition claims) should be re-joined in accordance with the provisions of MPEP § 821.04.

Support for the foregoing claim amendments may be found throughout the specification and originally filed claims. Specifically, support for the amendments to claims 1, 4, 6, 39-41 and 45-48 can be found at, for example, page 3, line 36 to page 4, line 2 of the specification. Support for the amendments to claims 15, 16, 43, 44, 49, 50, 53 and 57 can be found at, for example, page 8, line 32 to page 10, line 27 of the specification.

No new matter has been added by the claim amendments. The amendments to the claims and the cancellation of certain claims should not be construed as an acquiescence to the validity of the Examiner's rejections and were done solely in the interest of expediting prosecution and allowance of the claims. Applicants reserve the right to pursue the claims as originally filed in one or more further applications.

Restriction/ Election

The Examiner has withdrawn claims 49-58 as being “directed to an invention that is independent or distinct from the invention originally claimed.” It is Applicants’ understanding that once a composition claim is found to be allowable, the pending method claims that depend from or otherwise include all the limitations of an allowable composition claim will be re-joined in accordance with the provisions of MPEP § 821.04. Accordingly, Applicants respectfully request re-joinder of such claims (*e.g.*, claims 49-53, 56 and 57) when the pending composition claims are found to be allowable.

Rejection of Claims 1, 4, 6, 10-16 and 39-48 Under 35 U.S.C. § 101

The Examiner has rejected claims 1, 4, 6, 10-16 and 39-48 under 35 U.S.C. § 101 as being directed “toward non-statutory subject matter.” In particular, the Examiner is of the opinion that

[i]n the absence of the hand of man, naturally occurring nucleic acids are considered non-statutory subject matter. *Diamond v. Chakrabarty*, 206 USPQ 193 (1980). As previously stated, this rejection may be overcome by amending the claims to contain wording that specifies that the ‘full complement thereof’ portion of the claim is an isolated molecule. The problem found in the current claims can be illustrated more clearly by looking at claims 40, 47 and 48, which are each drawn to ‘an isolated nucleic acid which encodes a polypeptide’ or ‘a full complement thereof.’ While claims 1, 4, 6, 10-16, 39, 41-46 are not as clear as claims 40, 47 and 48, they also can be interpreted in a similar fashion as encompassing non-statutory subject matter.

Applicants respectfully traverse the foregoing rejection for the reasons of record. Notwithstanding the foregoing, solely in order to expedite examination and in no way acquiescing to the validity of the Examiner’s rejection, Applicants have amended the pending claims to specify that the claimed full complements are also *isolated* nucleic acid molecules. Accordingly, Applicants submit that the foregoing rejection has been rendered moot and, therefore, respectfully request reconsideration and withdrawal of the rejection of the pending claims under 35 U.S.C. §101.

CONCLUSION

Applicants believe that the foregoing amendments and remarks render the application in condition for allowance. If a telephone conversation with Applicants' Attorney would expedite the prosecution of the above-identified application, the Examiner is urged to call the undersigned at (617) 227-7400.

The Commissioner is hereby authorized to charge any deficiency in the fees paid herewith, or credit any overpayment, to Deposit Account No. 12-0080, under Order No. BGI-130CPRCE, from which the undersigned is authorized to withdraw.

Dated: August 9, 2007

Respectfully submitted,

By _____/MLZ/_____
Maria Laccotripe Zacharakis, Ph.D., J.D.
Registration No.: 56,266
Attorney for Applicants
LAHIVE & COCKFIELD, LLP
One Post Office Square
Boston, Massachusetts 02109